This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A system for creating a brain lesion, comprising:

a brain stimulation lead, including

at least one electrode at a distal end of the brain stimulation lead, the at least one electrode capable of delivering both stimulation pulses and lesioning current to tissue adjacent the at least one electrode;

at least one wire electrically connected to the at least one electrode; and

at least one contact at a proximal end of the lead electrically connected to the at least one electrode via the at least one wire;

an RF generator electrically connected to the at least one contact at the proximal end of the brain stimulation lead, which generator creates current delivered via the at least one wire and at least one electrode to tissue adjacent the at least one electrode; and

~~at least one temperature sensor~~ multiple temperature sensors positioned to sense and report the temperature near the tissue receiving the lesioning current.

Claim 2 (currently amended): The system of claim 1 wherein the ~~at least one temperature sensor is~~ multiple temperature sensors include at least one thermistor.

Claim 3 (currently amended): The system of claim 1 wherein the ~~at least one temperature sensor is~~ multiple temperature sensors include at least one thermocouple.

Claim 4 (withdrawn): The system of claim 1 wherein the ~~at least one temperature sensor is~~ multiple temperature sensors include at least one non-invasive temperature sensor.

Claim 5 (original): The system of claim 1 further comprising a controller electrically connected to the RF generator, which controller controls the current delivered to the tissue based on the sensed temperature.

Claim 6 (withdrawn): The system of claim 1 further comprising at least one recording electrode at a distal end of the brain stimulation lead.

Claim 7 (withdrawn): The system of claim 1 further comprising at least one lumen in fluid communication with at least one port in the brain stimulation lead.

Claim 8 (currently amended): A brain stimulation lead for creating a lesion, comprising:

at least one electrode at a distal end of the brain stimulation lead, the at least one electrode configured to deliver current to body tissue adjacent the at least one electrode, which current is at times stimulating current and at times lesioning current;

at least one wire electrically connected to the at least one electrode; and

at least a first contact at a proximal end of the brain stimulation lead and electrically connected to the at least one electrode via the at least one wire, which contact is configured for electrical connection to a pulse generator that creates stimulating current delivered via the at least one wire and the at least one electrode to tissue adjacent the at least one electrode;

at least a second contact at a proximal end of the brain stimulation lead and electrically connected to the at least one electrode via the at least one wire, which contact is configured for electrical connection to an RF generator that creates lesioning current delivered via the at least one wire and the at least one electrode to tissue adjacent the at least one electrode; and

~~at least one temperature sensor, which sensor senses and reports~~ multiple temperature sensors that sense and report the temperature near the body tissue receiving the lesioning current.

Claim 9 (original): The system of claim 8 wherein the first contact and second contact are one contact.

Claim 10 (currently amended): The system of claim 8 wherein the ~~at least one temperature sensor is~~ multiple temperature sensors include at least one thermistor.

Claim 11 (currently amended): The system of claim 8 wherein the ~~at least one temperature sensor is~~ multiple temperature sensors include at least one thermocouple.

Claim 12 (currently amended): The system of claim 8 further comprising at least a third contact at a proximal end of the brain stimulation lead and electrically connected to [[the]] at least one temperature sensor, which contact is configured for electrical connection to a controller that controls the lesioning current delivered to the tissue based on the sensed temperature.

Claim 13 (withdrawn): The system of claim 8 further comprising at least one recording electrode at a distal end of the brain stimulation lead.

Claim 14 (withdrawn): The system of claim 8 further comprising at least one lumen in fluid communication with at least one port in the brain stimulation lead.

Claim 15 (currently amended): A system for creating a lesion in body tissue, comprising:

means for generating stimulating current;

means for generating lesioning current;

means for delivering current from the current generating means to body tissue, which current is at times stimulating current and at times lesioning current; [[and]]

means for sensing temperature created by lesioning, wherein the means for sensing includes means for sensing temperature at multiple sites; and

means for modifying lesioning based on the sensed temperature.

Claim 16 (withdrawn): The system of claim 15, further comprising means for delivering substances to body tissue.

Claim 17 (currently amended): A method for treating a patient with a brain stimulation lead, comprising:

implanting a distal portion of a brain stimulation lead in a patient, which lead has at least one contact at a proximal portion electrically connected to at least one electrode at the distal portion;

connecting a pulse generator to the at least one contact of the brain stimulation lead;

delivering electrical pulses from the pulse generator to stimulate tissue adjacent the at least one electrode of the brain stimulation lead;

connecting an RF generator to the at least one contact of the brain stimulation lead;

delivering current from the RF generator to create a lesion in tissue adjacent the at least one electrode of the brain stimulation lead;

sensing the temperature adjacent the tissue receiving current from the RF generator and from at least one additional site along the brain stimulation lead; and

controlling lesion creation based on the sensed ~~temperature~~ temperatures.

Claim 18 (currently amended): The method of claim 17 further comprising controlling lesion creation with a controller communicating with the RF generator to provide closed-loop control based on the sensed ~~temperature~~ temperatures.

Claim 19 (currently amended): The method of claim 17 wherein the temperature sensing is performed by multiple sensors ~~sensor is~~ positioned in a distal portion of the brain stimulation lead.

Claim 20 (withdrawn): The method of claim 17 wherein the temperature sensing is performed by multiple sensors, wherein at least one sensor is an external sensor.

Claim 21 (withdrawn): The method of claim 17 wherein the distal portion of the lead further includes at least one recording electrode electrically connected to at least one contact at a proximal portion of the lead, the method further comprising:

connecting a recording system to the at least one contact electrically connected to the at least one recording electrode; and

measuring electrical activity adjacent the at least one recording electrode.

Claim 22 (withdrawn): The method of claim 17 wherein the distal portion of the lead further includes at least one port in fluid communication with at least one lumen defined by the body of the lead, the method further comprising:

connecting an infusion device to the at least one lumen in fluid communication with the at least one port; and

infusing an amount of a therapeutic substance into tissue adjacent the at least one port.

Claim 23 (original): A method for creating a lesion in a patient's body, comprising:

a) implanting a lead in a patient's brain;

b) electrically connecting the lead to an external RF generator;

c) creating a lesion with the lead and the external RF generator;

d) disconnecting the lead from the external RF generator;

e) waiting at least one week;

f) evaluating the results of the lesion; and

g) repeating b) through f) at least once to create a progressive, graduated lesion.

Claim 24 (original): The method of claim 23 further comprising connecting the lead to a pulse generating device and delivering stimulating pulses to the patient's brain with the lead and the pulse generating device.

Claim 25 (original): The method of claim 23 further comprising removing the brain stimulation lead from the patient's brain.

Claim 26 (original): The method of claim 23 further comprising creating the lesion outside the operating room.